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AUTHOR Neal, Menka E.

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ABSTRACT

This study investigated the relationship between graduate grade-point-average (GGPA) and the total score, as well as the scores on each part, of the Graduate Record Examination (GRE). It also investigated the relationship between GGPA and the total score, as well as the scores on each part, of the Test of English as a Foreign Language (TOEFL). The sample for the study consisted of 47 Indian and Chinese international graduate students who had completed their master of science degrees in an area of science or engineering at Rose-Hulman Institute of Technology (R-HIT) between the academic years of 1994-95 and 1997-98. All of the students in the study completed the GRE and TOEFL tests prior to their admission to R-HIT. The results of the study show that there is a significant positive linear correlation between GRE quantitative scores and GGPA, as well as a significant positive linear correlation between the GRE analytical scores and GGPA. Both of the correlations were significant at the 0.05 level. The study also shows that there are no other significant linear correlations, either positive or negative, between any of the other scores (TOEFL Total; TOEFL, Division 1; TOEFL, Division 2; TOEFL, Division 3; GRE Total; and GRE Verbal) and GGPA. (Contains 9 figures, 9 tables, and 10 references.) (Author/SLD)

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ED 424 294

The Predictive Validity of the GRE and TOEFL Exams with GGPA as the Criterion of Graduate Success for International Graduate Students in Science and Engineering

by: Menka E. Neal

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David Eilman

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Abstract

This study investigated the relationship between graduate grade-point-average (GGPA) and the total score, as well as the scores on each part, of the Graduate Record Examination (GRE). It also investigated the relationship between graduate grade-point-average (GGPA) and the total score, as well as the scores on each part, of the Test of English as a Foreign Language (TOEFL). The sample for the study consisted of 47 Indian and Chinese international graduate students who had completed their master of science degree in an area of science or engineering at Rose-Hulman Institute of Technology between the academic years of 1994-95 and 1997-98. All of the students included in the study completed the GRE and TOEFL tests prior to their admission to R-HIT.

The results of the study showed that there was a significant positive linear correlation between GRE quantitative scores and GGPA, as well as a significant positive linear correlation between the GRE analytical scores and GGPA. Both of the correlations were significant at the .05 level. The study also showed that there were no other significant linear correlations, either positive or negative, between any of the other scores (TOEFL Total; TOEFL, Division 1; TOEFL, Division 2; TOEFL, Division 3; GRE Total; and GRE Verbal) and GGPA.

Background of the Problem

The Graduate Record Examination (GRE) consists of the following three parts: Verbal, Quantitative, and Analytical. The Test of English as a Foreign Language (TOEFL) also consists of three parts: Listening Comprehension, Structure and Written Expression, and Reading Comprehension.

Most graduate schools in the United States require the submission of scores on the GRE and the TOEFL as a prerequisite for the admission of international graduate applicants. Such admissions standards are often based on the following assumptions: (1) the desirability of a candidate is directly proportional to his/her scores on the two exams; and (2) the individual's scores will predict, to some degree, his/her graduate grade-point-average (GGPA) and the probability of his/her success in graduate school.

At Rose-Hulman Institute of Technology (R-HIT), not unlike the majority of schools across the nation, all international graduate applicants must submit official GRE and TOEFL scores as part of the graduate application process. However, at R-HIT, there is no minimum GRE score required for graduate admission. The minimum TOEFL score for graduate admission at R-HIT is 580, with a distribution of Listening: 56; Structure and Written Expression: 60; Vocabulary and Reading Expression: 60. However, a department, upon approval of the Graduate Studies Committee, may waive the minimum requirement and admit a student who has not achieved the required total score.

Rationale

Although GRE and TOEFL scores are widely accepted as accurate graduate student selection instruments, their predictive validity has been questioned for some time. As a result, graduate admissions officers at many institutions of higher education have questioned the predictive value of the GRE and TOEFL tests, as well as the necessity of requiring the two examinations as part of the graduate international application process. Because of its high number of international graduate students (52% of the graduate student body as of September 5, 1998), Rose-Hulman Institute of Technology has become increasingly aware of the controversy surrounding the GRE and TOEFL examinations. As a result, the Institute wanted to ascertain whether its international graduate student body had performed at the level indicated by the students' GRE and TOEFL scores. The standard which they used for such determination was the final graduate grade-point-average of the students. The Institute examined and compared the students' GGPAs with their GRE and TOEFL scores. The goal was to determine whether or not a positive linear correlation between grade-point-average and performance on the GRE and TOEFL tests existed. If a *significant* positive correlation was found, the scores would continue to be used to determine whether an applicant would be admitted. They also would be used to determine whether an applicant would receive financial assistance and whether he/she would receive a stipend as part of the financial assistance package. (In the past, undergraduate grade-point-average and evidence of scholarly activity carried the most weight regarding admission and financial assistance.) If there was not a positive linear correlation between the students' GRE and TOEFL scores and their graduate grade-point-averages, the Institute would

determine if the GRE and TOEFL tests should be discarded as part of the graduate application process. Thus, the results of a correlational study between GRE scores and GGPA, as well as TOEFL scores and GGPA were very important to the graduate program at Rose-Hulman.

Review of the Literature

In the past, several studies have been conducted to determine if either or both the GRE and TOEFL examinations are predictors of success in graduate school as measured by final GGPA. However, the conclusions have varied. The following sections describe past studies of the correlation of GRE and TOEFL scores to GGPA.

Studies Regarding the TOEFL Examination. Although one study found a significant correlation between TOEFL scores and GGPA, most research regarding the TOEFL's predictive validity shows the test has, at best, weak validity. The one exception occurred in 1977, when Ayers and Peters, in a study of 50 Asian students who had completed master's degrees in the physical sciences or engineering, found a significant correlation between TOEFL scores and overall GPA ($r=.40$). This can be contrasted to a study in 1983 by Hale, Stansfield, and Duran, who, after reviewing 100 studies that examined the use of the TOEFL in admission processes, found that the validity of the TOEFL in predicting success in graduate school (as measured by grade-point-average) was questionable. Light, Xu, and Mossop went even further than Hale, et al., in their 1987 examination of 387 international students enrolled in a variety of graduate majors. The conclusion of the Light study was that no relationship between TOEFL scores and graduate grade-point-average could be found. Finally, the results of a study conducted by Ayers and Quattlebaum agreed

with those of the Light study. In 1992, upon studying 67 Asian engineering students, Ayers and Quattlebaum found that scores on the TOEFL examination were not effective predictors of academic success as measured by graduate grade-point-average. However, the study did find that the GRE Quantitative score was a significant predictor of success.

Studies Regarding the GRE Examination. Although most research regarding the TOEFL's predictive validity shows the test has, at best, weak validity, research regarding the predictive validity of the GRE has yielded mixed results. In 1974, Thacker and Williams analyzed numerous studies that were conducted during the 1960s in which graduate grade-point-average was the criterion variable. The results of their research showed that the correlations between GRE scores and GGPA were either (1) not significant or (2) so low that they were inefficient in forecasting power from a practical standpoint. Based on those results, the researchers concluded that "there were serious doubts about the predictive validity and usefulness of the GRE in identifying potentially successful graduate students." (p. 943) This conclusion was supported by Ingram (1983) who, after examining 10 studies on the relationship between GRE scores and success in graduate school (as measured by GGPA), asserted that the most "striking finding . . . [was] the . . . inability of GRE scores to consistently predict measures of graduate student success." (p. 711) Another study that yielded the same conclusion was that of Morrison and Morrison (1995). Based on their meta-analysis of how well GRE verbal and GRE quantitative scores forecast GGPA, the researchers concluded that "the average amount of variance . . . accounted for . . . was of such little magnitude that it appears [GRE verbal and GRE quantitative] are virtually useless from a predictive standpoint." (p. 313)

While the above studies conclude that the GRE possesses no, or at best, very weak predictive validity, other studies report that GRE scores correlate moderately with academic success. Milner, King, and McNeil (1984) found that, from a study of 145 full-time graduate students, the Pearson Product-Moment Correlation revealed a statistically significant relationship between GRE and GGPA (r=.238). This conclusion was further supported by a study conducted by House, Johnson, and Tolone (1987) in which the GRE scores of 76 graduate students in psychology were compared to GGPA. In their findings, the coefficient correlation for total GGPA was r=.25. Although they did not find a significant correlation between total GRE score and GGPA, Ayers and Quattlebaum's (1992) study suggested that the best predictor of success in graduate study was the quantitative score from the GRE (r=.32). Finally, a 1985 study by Thornell and McCoy suggests the strongest relationship between GRE and GGPA. Their statistics revealed for the total sample a coefficient of r=.43.

Anticipated Outcomes

It was anticipated that the present study would reveal no significant positive correlation between any divisional score or the total score on the TOEFL examination and the GGPA. It also was anticipated that the present study would reveal a positive correlation, although very weak, between the verbal and analytical divisional scores on the GRE examination and the GGPA, as well as between the total score on the GRE examination and the GGPA. Finally, it was anticipated that the study would reveal a significant positive correlation between the quantitative divisional score on the GRE examination and the GGPA.

Statement of the Problem

The Graduate Record Examination (GRE) and the Test of English as a Foreign Language (TOEFL) continue to be used by the majority of colleges and universities throughout the United States as a measure of the academic potential of international graduate applicants. However, over the past several years, there has been some question regarding whether or not the GRE and TOEFL tests are effective predictors of success in graduate school. The graduate office at R-HIT wanted to determine if international students' success in graduate school could be predicted and if they could be effectively predicted by GRE and TOEFL scores. Therefore, the following problem statements were developed:

General Statement of the Problem

Can the success of international students in graduate school be predicted?

Specific Statement of the Problem

Do the GRE and TOEFL examinations predict international students' success in graduate school, as measured by graduate grade-point-average?

Hypotheses

1. There is no linear correlation between graduate grade-point-average and performance on the GRE test (total score).

2. There is no linear correlation between graduate grade-point-average and performance on the verbal portion of the GRE test.

3. There is no linear correlation between graduate grade-point-average and performance on the quantitative portion of the GRE test.

4. There is no linear correlation between graduate grade-point-average and performance on the analytical portion of the GRE test.

5. There is no linear correlation between graduate grade-point-average and performance on the TOEFL test (total score).

6. There is no linear correlation between graduate grade-point-average and performance on the listening portion of the TOEFL test.

7. There is no linear correlation between graduate grade-point-average and performance on the structure and written expression portion of the TOEFL test.

8. There is no linear correlation between graduate grade-point-average and performance on the vocabulary and reading comprehension portion of the TOEFL test.

Purpose

The purpose of the present study was to examine and determine the correlation between the final graduate grade-point-averages of international students in a science or engineering master's degree program at Rose-Hulman Institute of Technology and their total scores on the GRE and TOEFL, as well as their scores on each part of the GRE and TOEFL tests.

Methodology

Subjects

The subjects of this study consisted of 47 native Indian and Chinese students who received the master of science degree in an area of science or engineering at Rose-Hulman Institute of Technology between the 1994-95 and 1997-98 academic years. The sample consisted of 34 males

and 13 females who completed degrees in the following engineering disciplines: Applied Optics (7); Biomedical Engineering (3); Chemical Engineering (7); Electrical Engineering (23); Environmental Engineering (2); and Mechanical Engineering (5). The students involved in the study represented the entire population of Indian and Chinese international graduate students who graduated from Rose-Hulman during the years given above.

All of the students included in the study completed the GRE and TOEFL tests prior to their admission to R-HIT. Two of the students in the study had total TOEFL scores that were below the required minimum of 580.

Statistical Analyses

For the study, information such as country of origin, gender, major, and the raw scores on each part of the GRE and TOEFL examinations were entered into a spreadsheet. From the spreadsheet, scatter plots of raw scores were generated. Thereafter, descriptive statistics were computed. Finally, Pearson Product-Moment correlations between (1) the total GRE score and the graduate grade-point-average; (2) the score on each part of the GRE and the graduate grade-point-average; (3) the total TOEFL score and the graduate grade-point-average; and (4) the score on each part of the TOEFL and the graduate grade-point-average were calculated. Statistical significance was tested at the .05 and .01 levels.

Results

Figure 1 shows the spreadsheet from which the data for the present study were taken. From the spreadsheet, scatter plots of raw scores were generated. (See Figures 2 through 9.) Table 1

shows the descriptive statistics that were compiled from the raw scores. The statistics include the range, the minimum score, the maximum score, the mean, the standard deviation, and the variance. Finally, the cor elations between each test score and the graduate grade-point-average (GGPA) were computed. Th . results are shown in Tables 2 through 9.

Discussion, Conclusions, Recommendations

Discussion and Conclusions

Similarly to many of the previous studies which analyzed the relationship between TOEFL scores and GGPA, the present study showed no significant correlation between the total TOEFL score or any divisional TOEFL score and the GGPA. Interestingly, however, even though the correlations were not significant, each test between any TOEFL score and the GGPA yielded a *negative* correlation. Therefore, for international Indian and Chinese students at R-HIT, it appears the TOEFL test has little, if any, predictive value regarding GGPA. This conclusion is in direct contrast to one of the two studies found involving graduate engineering students and the predictive validity of the TOEFL. The study by Ayers and Peters in 1977 showed that there was a significant correlation between TOEFL scores and overall GPA. The present study does not support that conclusion. However, the present study *does* support the 1992 study of graduate engineering students by Ayers and Quattlebaum. The Ayers and Quattlebaum study showed that scores on the TOEFL exam were not effective predictors of academic success as measured by GGPA. The results of the present study directly agree with those of the 1992 Ayers' study. Therefore, each of the null hypotheses regarding the TOEFL exam must be accepted.

Figure 1:

STATISTICS on R-HIT INTERNATIONAL GRADUATE STUDENTS RECEIVING M.S. 1994-1998

Student	Sex	Country	Major	GGPA	TOEFL Total	TOEFL 1	TOEFL 2	TOEFL 3	GRE Total	GRE V	GRE Q	GRE A
1	F	China	AO	3.782	633	61	66	63	2010	570	780	660
2	M	China	AO	3.833	623	59	68	60	2080	580	790	710
3	F	China	AO	4.000	590	51	68	58	1930	530	780	620
4	F	China	BE	3.846	627	60	63	65	1960	560	800	600
5	M	China	BE	4.000	600	58	61	61	2200	670	790	740
6	F	China	ME	3.885	610	58	60	65	1930	510	800	620
7	M	China	ME	3.987	613	62	68	54	1990	580	790	620
8	M	China	ME	3.957	603	61	61	69	1990	440	800	750
9	F	China	AO	3.400	593	57	60	61	1770	440	710	620
10	M	China	AO	3.872	627	57	64	67	1990	500	780	710
11	M	India	ChE	3.056	640	63	64	65	2150	600	780	770
12	M	India	EE	3.692	653	61	68	67	2140	690	790	660
13	M	India	EE	3.936	647	61	68	65	1870	420	800	650
14	F	China	EE	3.872	623	61	64	62	1870	410	720	740
15	M	China	EE	3.981	603	58	61	62	2050	560	800	690
16	M	China	EE	3.871	593	60	60	58	1990	450	800	740
17	M	India	EE	3.628	603	57	66	58	1690	410	710	570
18	M	India	EE	3.744	597	53	61	65	1850	440	760	650
19	F	China	EVE	3.897	617	59	64	62	2020	520	790	710
20	M	India	ME	3.833	623	61	64	62	1980	530	780	670
21	M	China	AO	3.571	640	61	66	65	1830	590	730	510
22	M	China	EE	3.500	613	58	62	64	2030	540	790	700
23	M	China	EE	3.750	623	58	64	65	1980	510	800	670
24	F	China	EE	3.827	580	52	60	62	1940	530	710	700
25	M	China	ME	4.000	610	59	61	63	2010	510	790	710
26	M	India	AO	3.923	663	64	68	67	2010	670	710	630
27	M	China	ChE	4.000	600	58	63	59	1890	380	790	720
28	F	China	BE	4.000	593	56	61	61	1890	530	690	670
29	M	India	EE	3.590	653	65	68	63	1810	630	610	570
30	M	India	BE	3.663	630	56	68	65	1840	520	730	590
31	M	China	EE	3.949	620	58	65	63	2060	520	790	750
32	M	China	ChE	3.936	653	61	68	67	2160	600	800	760
33	F	China	ChE	4.000	593	57	60	61	1810	460	790	560
34	M	China	ChE	3.590	600	58	63	69	1810	490	760	560
35	M	China	ChE	3.885	567	54	56	60	1930	450	800	680
36	M	China	ChE	3.570	583	52	62	61	1740	390	780	570
37	M	China	EE	3.989	633	62	63	65	2000	490	780	730
38	F	China	EE	3.907	637	64	61	66	2070	580	780	710
39	M	China	EE	3.705	610	59	61	63	2040	590	760	690
40	M	India	EE	3.907	607	61	61	60	1940	480	800	660
41	M	India	EE	4.000	667	68	68	64	1820	460	720	640
42	M	China	EE	3.744	623	59	68	60	1990	510	800	680
43	M	China	EE	3.359	613	56	68	60	1670	430	730	510
44	M	China	EE	3.441	633	61	68	61	1680	410	730	540
45	M	China	EE	3.886	563	53	58	58	1770	410	760	600
46	F	India	EVE	3.692	667	65	68	67	2070	620	740	710
47	F	China	EE	3.943	587	56	60	60	1900	420	800	680

Figure 2:

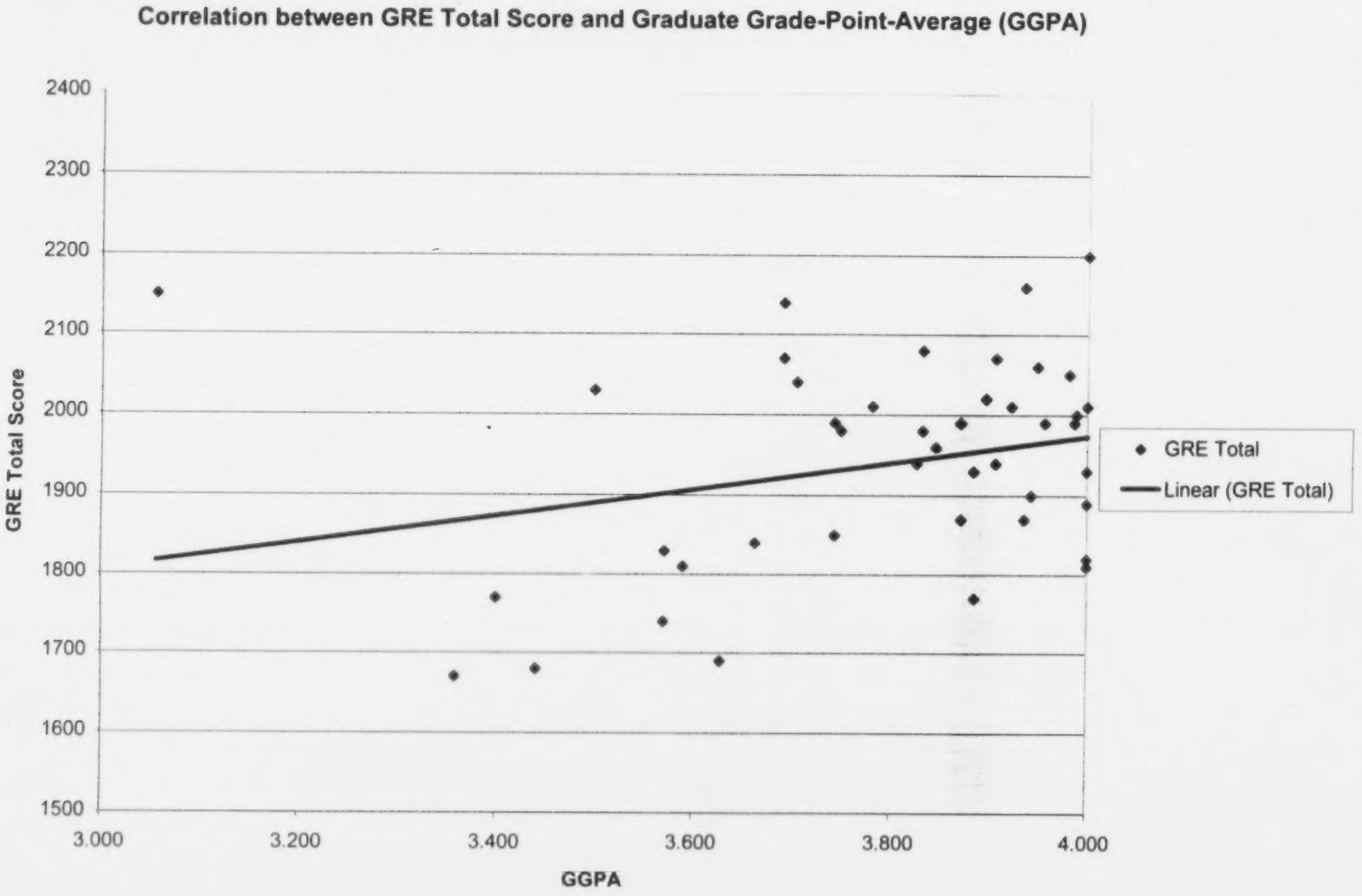

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Figure 3:

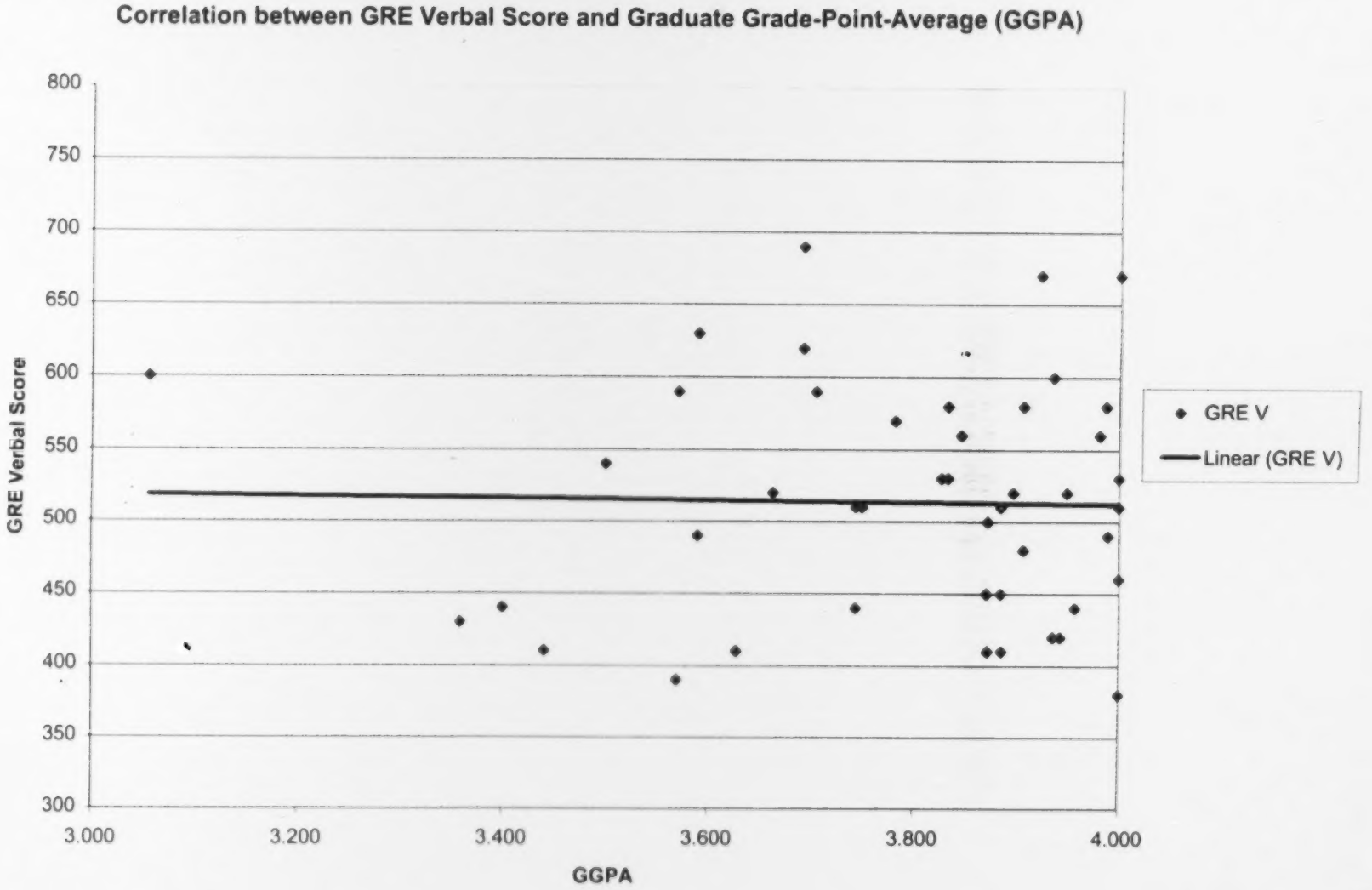

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Figure 4:

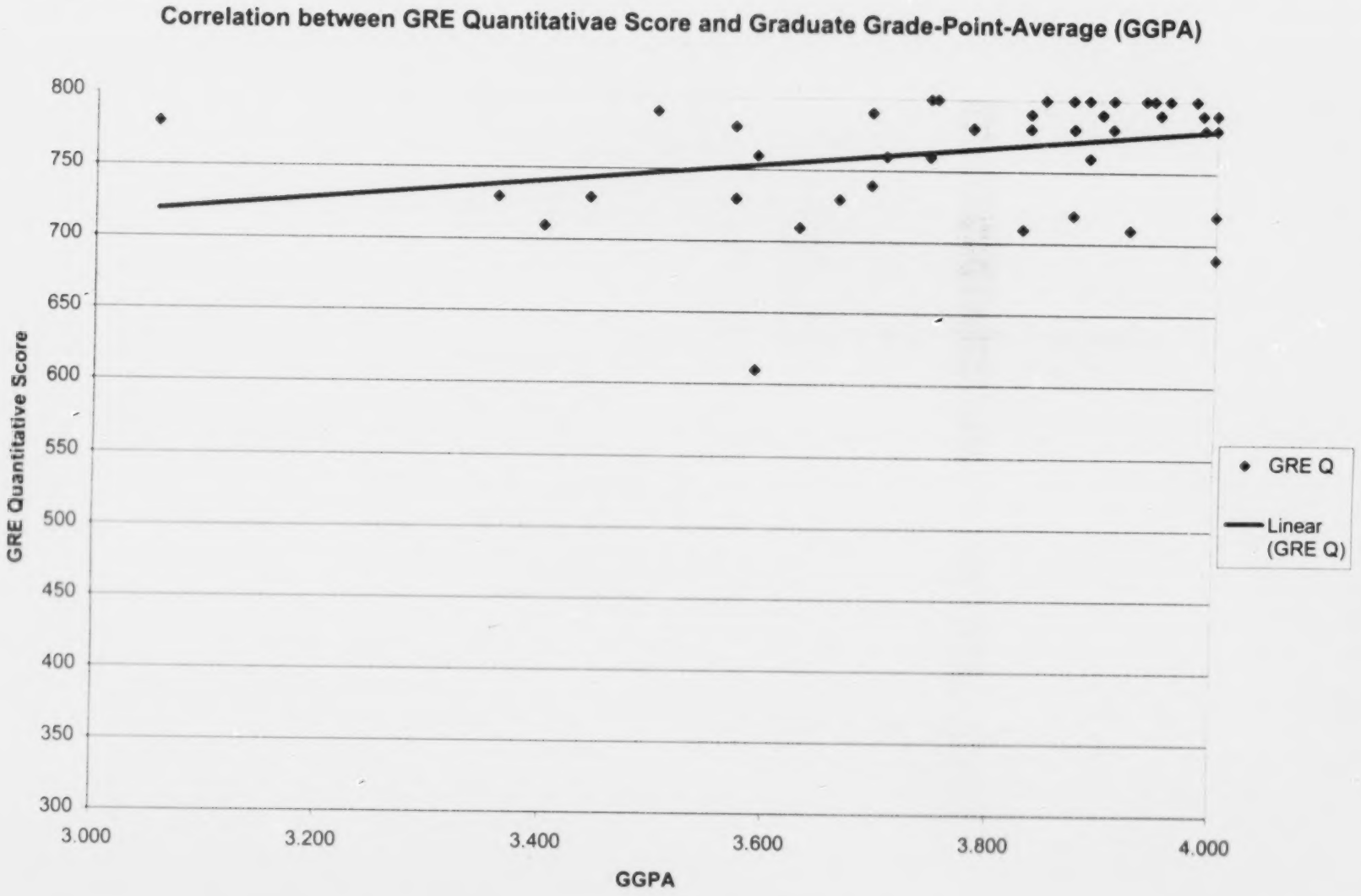

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Figure 5:

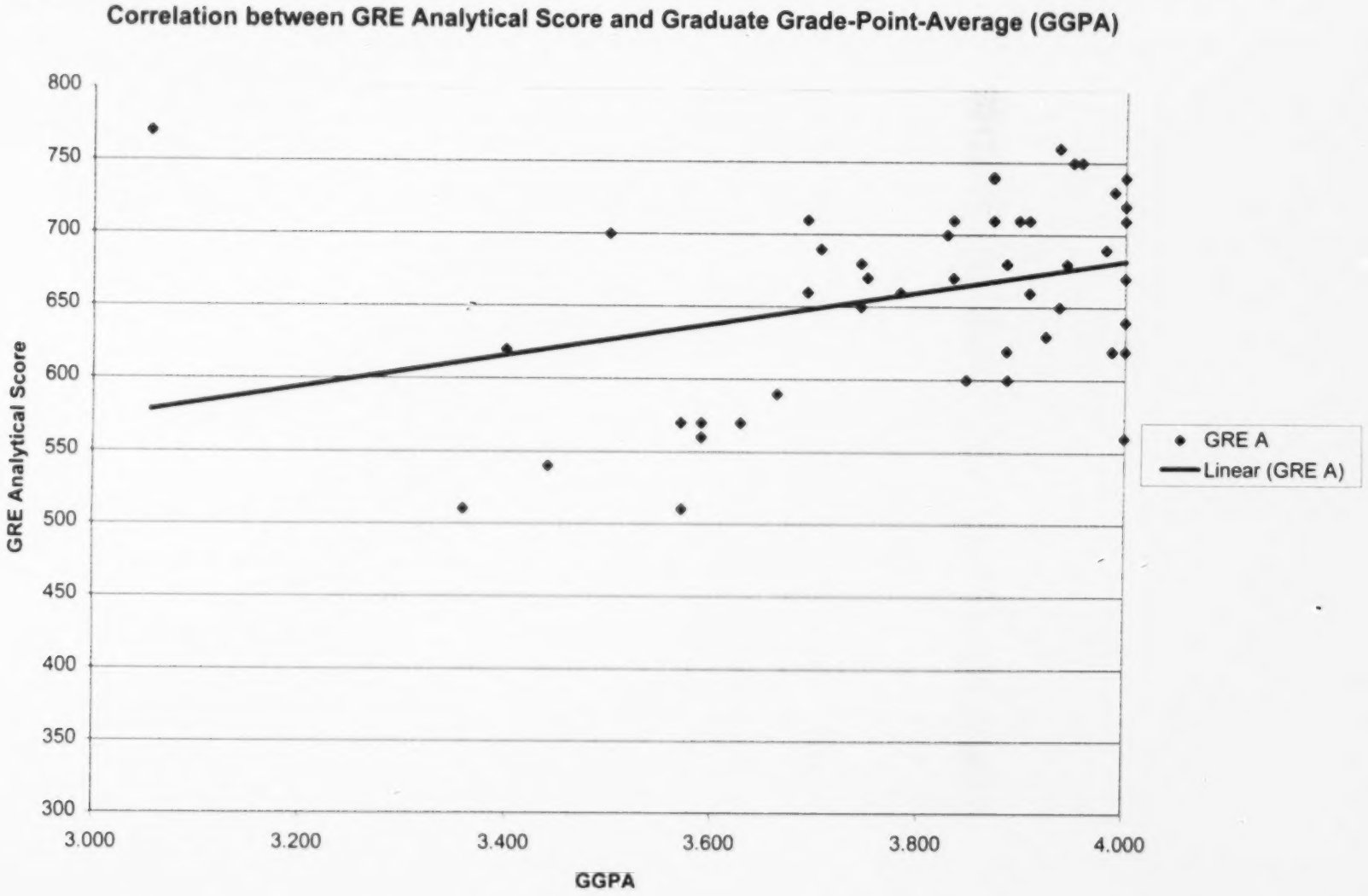

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Figure 6:

Correlation between TOEFL Total Score and Graduate Grade-Point-Average (GGPA)

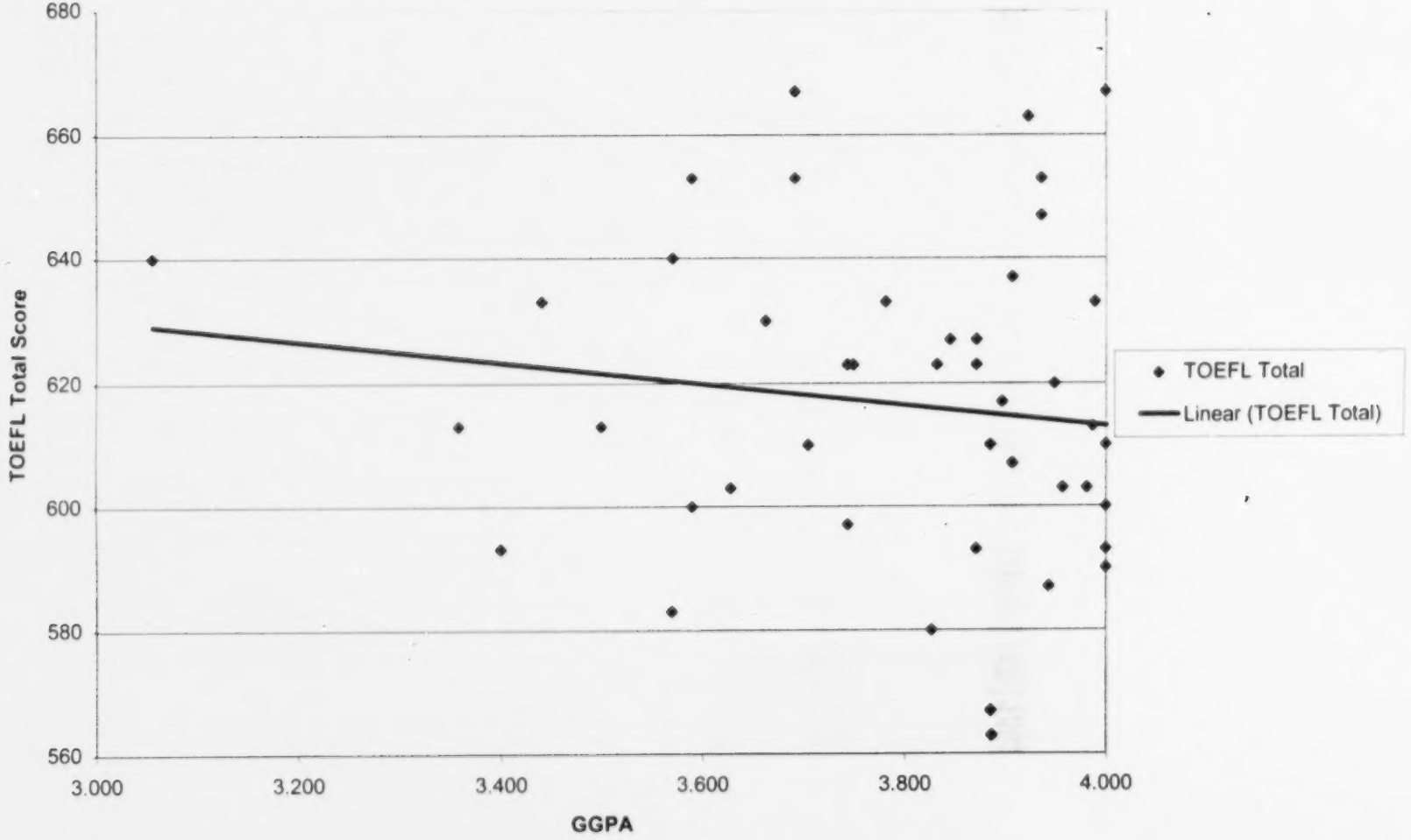

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Figure 7:

Correlation between TOEFL Score, Division 1, and Graduate Grade-Point-Average (GGPA)

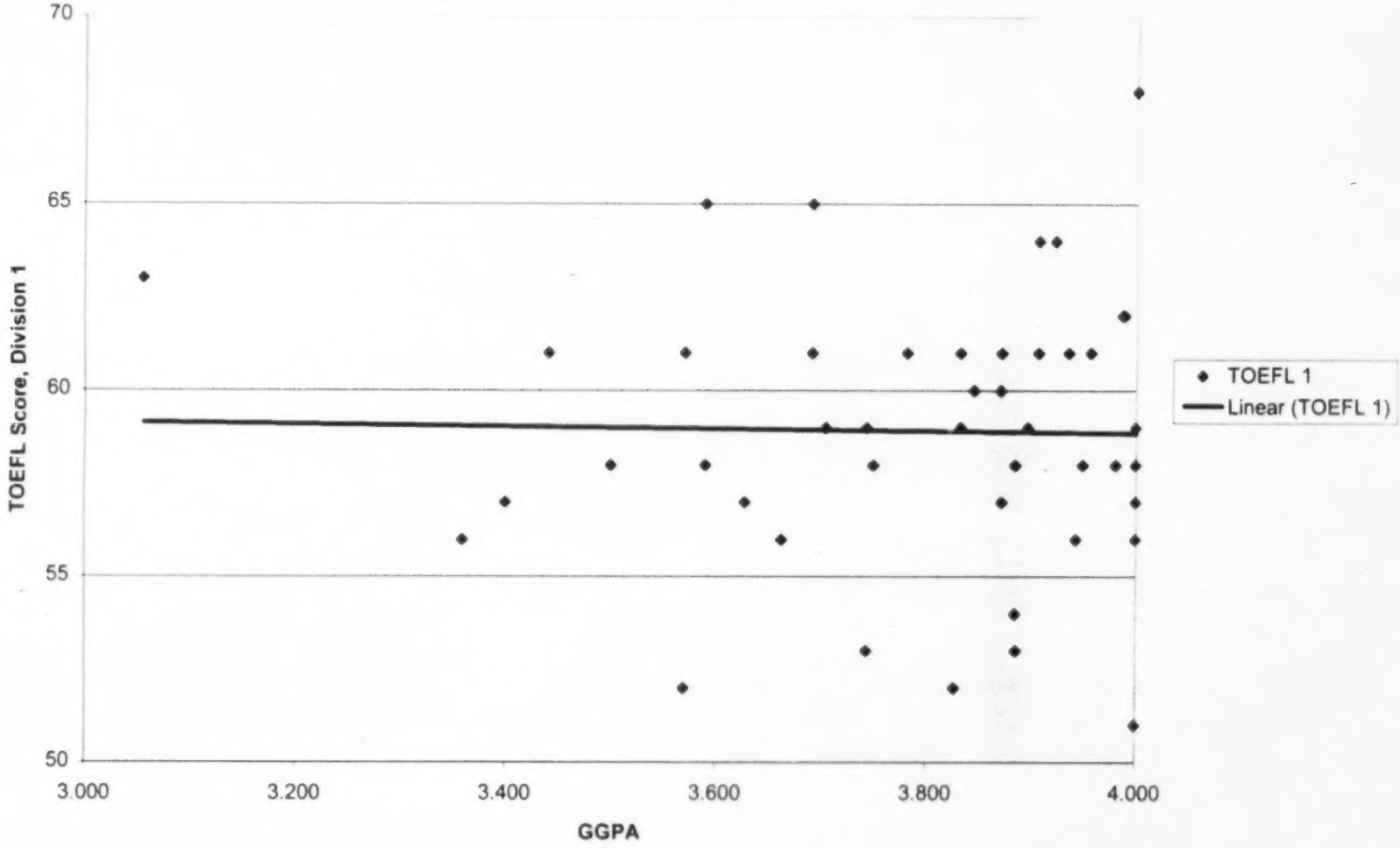

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Figure 8:

Correlation between TOEFL Score, Division 2, and Graduate Grade-Point-Average (GGPA)

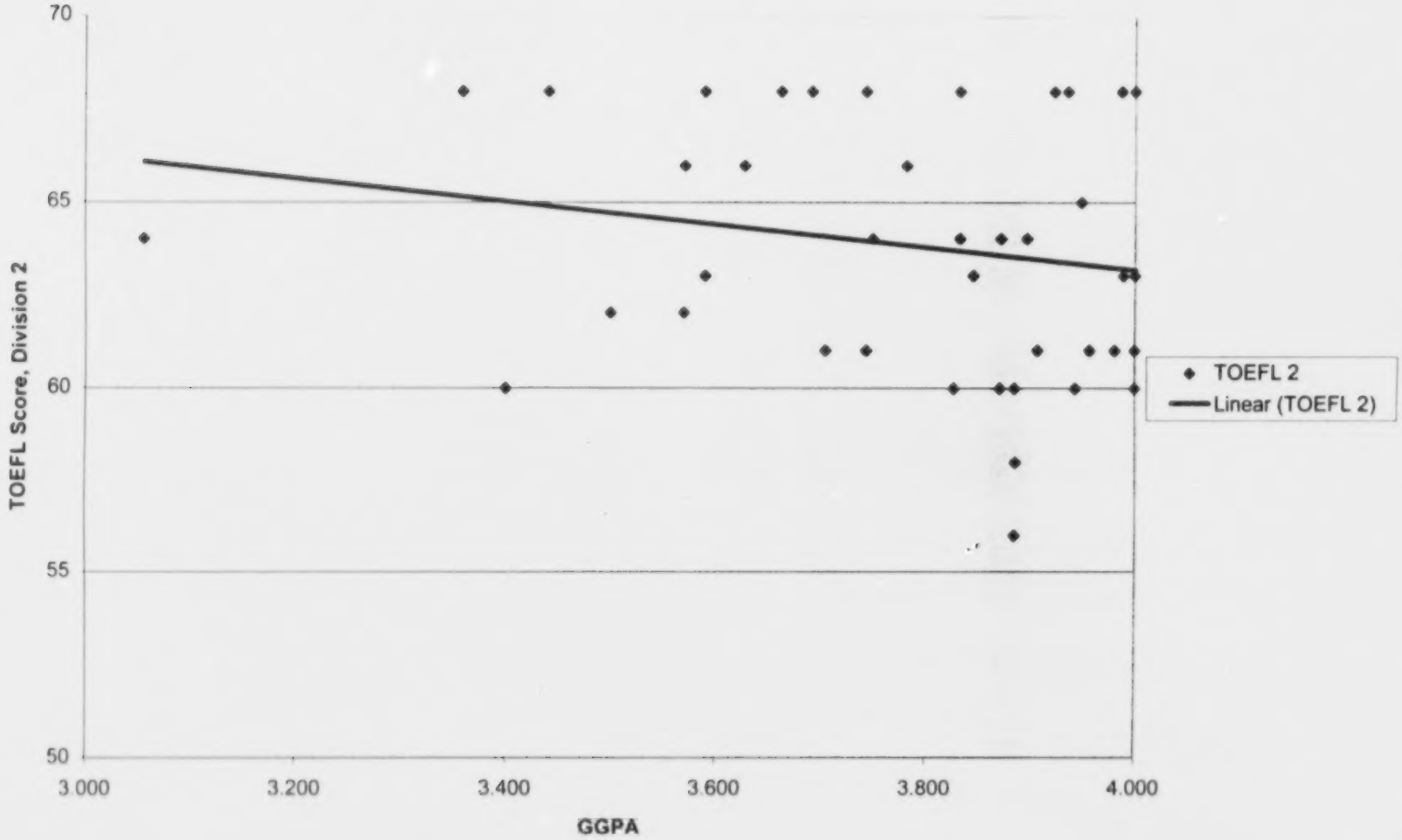

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Figure 9:

Correlation between TOEFL Score, Division 3, and Graduate Grade-Point-Average (GGPA)

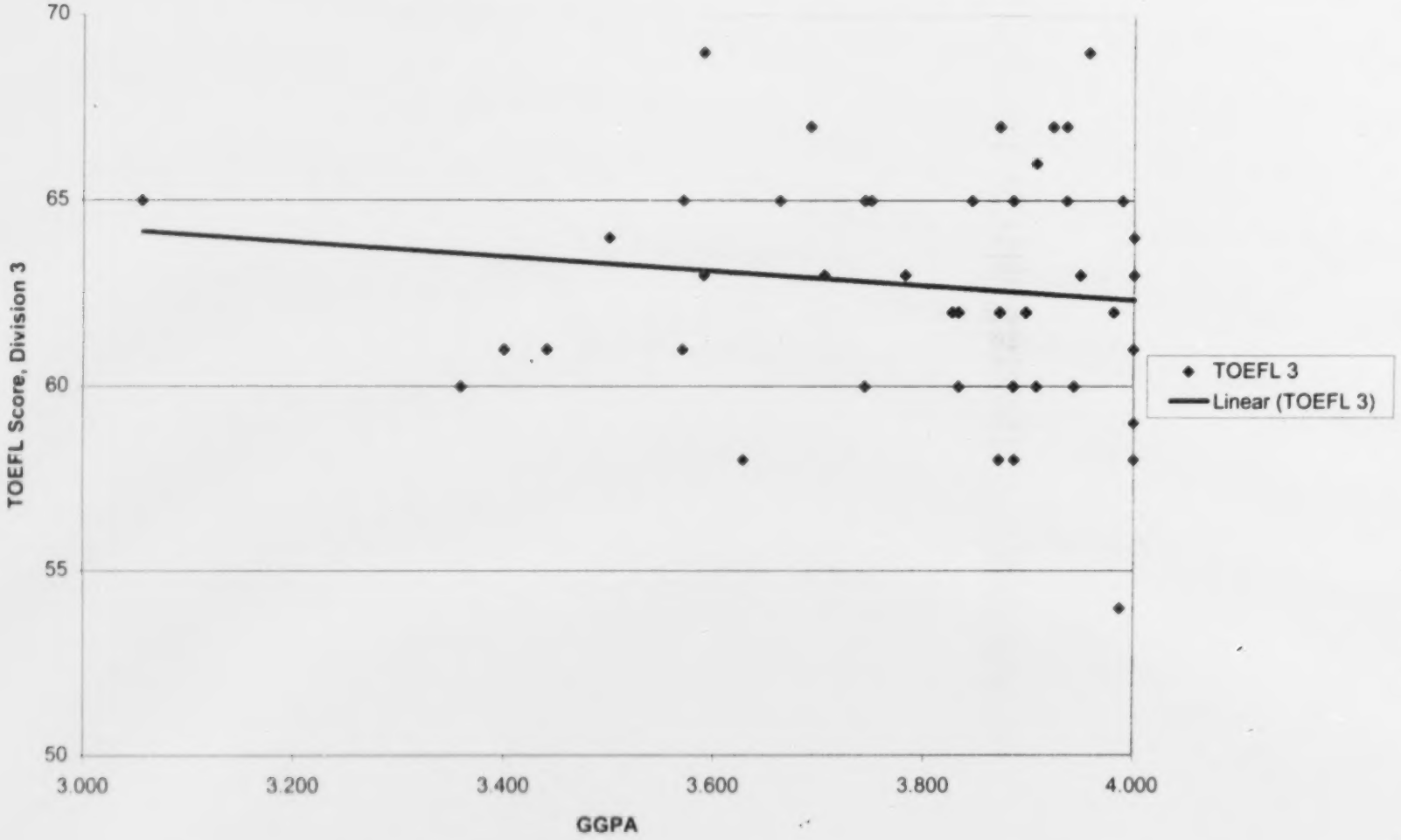

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Table 1: Descriptive Statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
GGPA	47	.944	3.056	4.000	3.79572	.20783	4.32E-02
TOEFLTTL	47	104	563	667	616.57	24.98	623.989
TOEFL1	47	17	51	68	58.91	3.60	12.993
TOEFL2	47	12	56	68	63.79	3.37	11.389
TOEFL3	47	15	54	69	62.72	3.21	10.335
GRETOTAL	47	530	1670	2200	1939.36	127.83	16340.9
GREV	47	310	380	690	513.40	79.02	6244.681
GREQ	47	190	610	800	766.38	40.13	1610.546
GREA	47	260	510	770	659.57	67.76	4591.119
Valid N (listwise)	47						

Table 2: Correlation between Total TOEFL Score and GGPA

Correlations

		GGPA	TOEFLTTL
Pearson Correlation	GGPA	1.000	-.141
	TOEFLTTL	-.141	1.000
Sig. (2-tailed)	GGPA	.	.346
	TOEFLTTL	.346	.
N	GGPA	47	47
	TOEFLTTL	47	47

Table 3: Correlation between TOEFL Score, Division 1, and GGPA

Correlations

		GGPA	TOEFL1
Pearson Correlation	GGPA	1.000	-.017
	TOEFL1	-.017	1.000
Sig. (2-tailed)	GGPA	.	.910
	TOEFL1	.910	.
N	GGPA	47	47
	TOEFL1	47	47

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Table 4: Correlation between TOEFL Score, Division 2, and GGPA

Correlations

		GGPA	TOEFL2
Pearson Correlation	GGPA	1.000	-.193
	TOEFL2	-.193	1.000
Sig. (2-tailed)	GGPA	.	.194
	TOEFL2	.194	.
N	GGPA	47	47
	TOEFL2	47	47

Table 5: Correlation between TOEFL Score, Division 3, and GGPA

Correlations

		GGPA	TOEFL3
Pearson Correlation	GGPA	1.000	-.126
	TOEFL3	-.126	1.000
Sig. (2-tailed)	GGPA	.	.400
	TOEFL3	.400	.
N	GGPA	47	47
	TOEFL3	47	47

Table 6: Correlation between Total GRE Score and GGPA

Correlations

		GGPA	GRETOTAL
Pearson Correlation	GGPA	1.000	.271
	GRETOTAL	.271	1.000
Sig. (2-tailed)	GGPA	.	.065
	GRETOTAL	.065	.
N	GGPA	47	47
	GRETOTAL	47	47

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Table 7: Correlation between GRE Verbal Score and GGPA

Correlations

		GGPA	GREV
Pearson Correlation	GGPA	1.000	-.017
	GREV	-.017	1.000
Sig. (2-tailed)	GGPA	.	.907
	GREV	.907	.
N	GGPA	47	47
	GREV	47	47

Table 8: Correlation between GRE Quantitative Score and GGPA

Correlations

		GGPA	GREQ
Pearson Correlation	GGPA	1.000	.328*
	GREQ	.328*	1.000
Sig. (2-tailed)	GGPA	.	.025
	GREQ	.025	.
N	GGPA	47	47
	GREQ	47	47

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9: Correlation between GRE Analytical Score and GGPA

Correlations

		GGPA	GREA
Pearson Correlation	GGPA	1.000	.338*
	GREA	.338*	1.000
Sig. (2-tailed)	GGPA	.	.020
	GREA	.020	.
N	GGPA	47	47
	GREA	47	47

*. Correlation is significant at the 0.05 level (2-tailed).

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The correlational study of GRE scores and GGPA yielded the greatest surprise of the study. Not unlike previous studies, the present study showed there was no significant correlation between the total GRE score or the GRE verbal score and GGPA. Therefore, the null hypotheses regarding each of the two scores must be accepted.

The present study *did* show a significant positive correlation (at the .05 and .025 levels) between the GRE quantitative score and the GGPA. This result agrees with the 1992 study by Ayers and Quattlebaum, which also involved graduate engineering students. As with the present study, the Ayers and Quattlebaum study concluded that the GRE quantitative score was an effective predictor of success in graduate school, as measured by GGPA. Based on these results, the null hypothesis regarding the correlation between the GRE quantitative score and the GGPA must be rejected.

The most surprising result of the present study was that the greatest level of significance was shown between the GRE analytical score and the GGPA. Upon computing the correlation between the two variables, statistical significance was obtained at both the .05 and .020 levels. *No other statistical study regarding the predictive validity of GRE scores in relation to GGPA consulted for the present research yielded such a result.* Thus, the null hypothesis regarding the correlation between the GRE analytical score and the GGPA must be rejected.

Recommendations

While it would seem that, from the results of the present study, the TOEFL should be discarded as a tool for predicting success in graduate school and that only the quantitative and

analytical portions of the GRE exam should be retained, it is important to note the limitations of the present study. First of all, the sample size is relatively small and, therefore, may not be fully accountable. Secondly, there was no control of the subjects' educational background and/or their preparation for the TOEFL and GRE exams. In addition, there also was no control regarding the grading system within the different academic departments represented by the sample, nor was there an equal representation of all departments.

In addition to the above elements, it is important to note that other factors also may have contributed to the outcome of the study. First of all, it should be noted that the international students who are accepted into the graduate program at R-HIT are among the best and the brightest in their fields. Such students must submit not only TOEFL and GRE scores but also letters of recommendation, a statement of rank-in-class, and evidence of scholarly activity. Therefore, the academic level of students involved in graduate studies at R-HIT is quite narrow. Secondly, the fact that all of the applicants had engineering backgrounds also must be considered. Engineers, in general, must complete an overwhelming number of science and mathematics courses. As a result, they usually possess fairly outstanding quantitative and analytical skills. This fact may account for the high numbers scored on the quantitative and analytical portions of the GRE exam by the students in the study.

When drawing conclusions and making recommendations, one also must consider the fact that all but 2 of the international students involved in the study were required to and did score at least 580 on the TOEFL exam. This, coupled with the fact that, in order to graduate with a master

of science degree from R-HIT, the students (as is the case with all graduate students at R-HIT) had to possess a GGPA of at least 3.0, may have contributed to the study's outcome. As shown in the descriptive statistics in Table 1, the mean GGPA of the students involved in the study was 3.796, with a standard deviation of .20783 and a range of .944. Therefore, when considering TOEFL scores and GGPA, the fact that the differences in GGPA were so small may account for the fact that there was no significant correlation between the TOEFL scores and the GGPA.

Finally, before any determination is made regarding discarding all or a portion of the TOEFL and GRE exams as graduate application requirements, one must realize that the GGPA may not be sufficient to evaluate graduate success. As stated previously, grades do not range substantially among the graduate students at R-HIT. In addition, other factors, such as attitude, independence, leadership skills, and dedication--all of which may be essential to graduate success--are not scored on the TOEFL and GRE exams. This, too, must be considered when making recommendations.

Before the TOEFL and GRE exams are completely or partially discarded as graduate application requirements at R-HIT, it should be determined if either of the tests provides a useful screening device for determining if a potential student has the minimum level of skills needed to function at R-HIT. If the answer is yes, perhaps the tests should be retained as part of the application process. If the answer is no, it may be wise to develop other methods of evaluating applications (perhaps methods that test both the cognitive and affective attributes of students) before the traditional tests are eliminated.

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